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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/677,876  
Filing Date: September 30, 2003  
Appellant(s): AIKENS ET AL.

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Steven M. Greenberg  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/21/11 appealing from the Office action mailed 08/23/10.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

The following is a listing of the evidence relied upon the rejection of claims under appeal:

CHEN AT AL, Patent Application Publication US 2002/0147828, filed on April 05, 2002.

Applicant Admitted Prior Art (AAPA) {pars. 0007-0008}

WUSTENHOFF ("Service Level Agreement in the Data Center", April 04, 2002, article, published by Sun Microsystems, Inc).

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 4-9** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In accordance with *In re Bilski*, 88 USPQ2d 1385 (Fed.Cir. 2008) the **Machine -or-Transformation Test**, the claimed process must:

- (1) be tied to a particular machine or apparatus (machine implemented); or
- (2) particularly transform a particular article to a different state or thing.

A method claim that does not require machine implementation or does not cause a transformation will fail the test and should be rejected under § 101. However, the mere presence of a machine tie or transformation is not sufficient to pass the test. When

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a machine tie or transformation has been identified, it must be further determined that the tie is to a **particular** machine or the particular transformation is of a **particular** article. Additionally, the particular machine tie or particular transformation must meet two corollaries to pass the test for subject matter eligibility.

First, the use of the particular machine or transformation of the particular article must impose a **meaningful limit** on the claim's scope. So, a machine tie in only a field-of-use limitation would not be sufficient.

Second, the use of the particular machine or the transformation of the particular article must involve **more than insignificant "extra-solution" activity**. If the machine or transformation is only present in a field-of-use limitation or in a step that is only insignificant "extra-solution" activity, the claim fails the Machine-or-Transformation test, despite the presence of a machine or a transformation in the claim.

Here claims fail to meet the above requirements since there is not a sufficient tie to a particular machine (2) transformation, and thus is directed to nonstatutory subject matter. Even though, the preamble has amended to "A method, within a computer hardware device", the steps (such as *creating....; combining....; arranging...*" is not tied to a particular machine, and thus the claims are directed to nonstatutory subject matter.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHEN ET AL (US 2002/0147828) in view of Applicant Admitted Prior Art (**AAPA**) {pars. 0007-0008} .

**As for independent claim 1**, CHEN ET AL disclose computer readable storage medium having stored thereon a composite, multi-tier service level agreement (SLA) [data structure] stored within a computer hardware device {pars. 0028, 0038-0039} comprising:

a) a plurality of service offerings [data objects]

{see pars. 0017 CHEN ET AL discloses “*offer different classes of service*”; par. 0028; Paragraph 0043 discloses a SLA a negotiation “between a user and a service provider”, and “between two peer service providers” for “agreement *on quality of service* (QoS)” (paragraph 0046). An SLA “agreement” is a “pre-determined service level objectives”. Further, Chen discloses in paragraph 0050 “Figure 5 summaries *intra-*

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*SLA/inter-SLA the different levels of policies control and the Network Service*

*Attributes/Classes are combined to achieve SLA-enable Resource Management". As*

such, Chen clearly disclose the "Network Service Attributes/Classes" as "a collection of service components" having "intra-SLA/inter-SLA" or "QoS" as "pre-determined service level objectives".

b) a plurality of SLAs [data objects] combined into a single, composite SLA [data structure] which is having hierarchical organization based upon dependencies between said service offerings

{see figures 5A-B and par. 0050 " intra-SLA /inter-SLA the different level of policies/service are combined to achieve SLA-enabled quality of service (QoS) inter-working or SLA-based End-to-End Qos Provisioning; par. 0056 "Policy can be represented at different levels, ranging from high level quality of service goals to device specific configuration parameter" which indicates a single "hierarchical organization" structure. CHEN pars.0061, 0065, 0068, figures 6A-6B shows the "hierarchical organization" is based on the three levels of policies that are depended on each other and derived from SLA.

CHEN ET AL disclose all the claim invention indicated above except for the service offerings (step a) including the internal and external service level objectives. However, this feature has cited in the **AAPA** on par. 0008 disclose the well known the feature of generating the internal service level objective for view only of the service provider and external service level objective for the view of both the service provider

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and the customer in order for providing a complete service offering of the service level agreement (SLA) which is provided to customer.

Therefore it would have been obvious to one of ordinary skill in the art to modify the method of CHEN ET AL to include the different level of objectives (internal and external) as taught by AAPA for the benefits of providing a complete service offering of the service level agreement (SLA) which is provided to customer {AAPA, par. 0008}

More over, it appears that a composite multi-tier service level agreement (SLA) stored within a computer hardware device" is considered as the type of information or data, wherein this composite multi-tier service level agreement information comprising the information of a services offerings with both internal and external service level objectives, hierarchical organization. These type of information of the service level agreement have been determined to be non-functional descriptive material (NFDM), thus having no patentable weight and does not need to be taught by the prior art. Nonfunctional descriptive material can not render nonobvious an invention that would have other wise been obvious. In re Gulack, 703 F. 2d 1381, 1385, 217 USPQ 401, 40-4 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability. See MPEP 2106.01.

Noted: the claim "SLA data structure" is not seen to be explicitly supported in the Application Specification, and this data structure is also not "designed to support specific data manipulation function". See MPEP 2106.01 (The definition of "data structure" is a "physical or logical relationship among data elements, designed to

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support specific data manipulation functions” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5<sup>th</sup> ed. 1993). As further explain in section B, response to argument below, the claim “SLA data structure” is viewed as Nonfunctional Descriptive Material.

**As for claim 2**, which deals with each of the SLAs corresponds to internal service offering and an external service offering, this is fairly taught in AAPA, par. 0008.

**As for claim 3**, this is taught in AAPA which discloses the SLAs, and the relationship (connection / defining or redefining) between an external and internal service offering and its associated parties such as the service provider and the customer {see par. 0008}.

4. Claims **4-9** (method), **10-15** (computer program) are rejected under 35 U.S.C. 103(a) as being unpatentable over CHEN ET AL (US 2002/0147828) a lone or in view of WUSTENHOFF (“Service Level Agreement in the Data Center”, 04/04/2002, article, published by Sun Microsystems, Inc).

**As for independent claim 4**, CHEN discloses method within a computer hardware device, of constructing a composite, multi-tier service level agreement (SLA) {pars. 0038-0039}, and the method comprising the steps of:

a) creating some information/data for use as an internal service offering;

{see par. 0017, figure 2 “Network management level”, disclose different classes of service offering, an pars. 0028-0030 disclose the internal service offering/inter Domain SLA which is the *service between two service providers/network operators*}; and

b) creating some information/data for use as an external service offering which relates to the information about internal service offering;

{see figure 2 "service management level/external service, pars. 0028-0030 disclose the external service offering/Intra Domain which is service between the *user* and *its service providers/network operator*. Note the service/providers/network is related to the internal service because it is also the service between two service providers /operators/network};

c) combining the above internal and external information/data in order to form a composite offering set on the form for SLA use;

{see figures 5A-B and par. 0050 " intra-SLA /inter-SLA the different level of policies/service are *combined* to achieve SLA-enabled quality of service (QoS) inter-working or SLA-based End-to-End Qos Provisioning; par. 0056 discloses the level of policies/service can be represented at different levels, ranging from high level quality of service goals to device specific configuration parameter. Also Chen, {par. 0061-0062, 0065, 0068 and figures 6A-6B, claim 3} shows the "hierarchical organization" is based on the three level of policies that are depended on each other and derived from SLA};

d) arranging the information/data about internal and external offering features in a hierarchy to form a chart or form having multi-tier displaying information for use as SLA.

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{see figures 6A-6B, pars. 0056, 0059-0061, 0064 disclose the hierarchy or ranging the different policy levels of service}

CHEN ET AL disclose all the claim invention stated above, e.g. intra domain SLA between the user and its service provider, and the inter domain SLA between the two service network providers/operators {pars. 0028-0030}. CHEN ET AL does not mention about the "internal SLA and external SLA" features. However, It would have been obvious to modify other criteria in CHEN ET AL e.g. the intra domain SLA and inter domain SLA as mere using other similar internal and external SLA since these both similar features are dealt with the service offering in the SLAs.

WUSTENHOFF merely cited creating the SLA feature to which include the internal SLA and external SLA feature to segment service offerings with different pricing for different service levels benefits both the vendor and the customer, pages 4, pars. 3-5 and table 5, page. 8. It would have been obvious to one of ordinary skill in the art to modify the method CHEN AT AL to include the internal SLA and external SLA features as taught by WUSTENHOFF for the benefit as cited above and also to provide a success Service Level Agreement (SLA) system as well as a better relationship and agreement between service provider and customer.

Note: As for the term "*for an internal service offering (step a); for an external.....service offering; (step b); to form a composite SLA (step c)*", this is not a positively recited method step but, rather as intended use of the previous step/function "creating and combining". Furthermore, it appears that a composite multi-tier service level agreement (SLA) stored within a computer hardware device" is considered as the

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type of information or data, wherein this composite multi-tier service level agreement information comprising the information of a services offerings with both internal and external service level objectives, hierarchical organization. This type of information of the service level agreement is determined to be non-functional descriptive material (NFDM) because the data “does not” impart functionality when employed as a computer component, thus having no patentable weight. See MPEP 2106.01 “Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.”

Noted: the claim “SLA data structure” is not seen to be explicitly supported in the Application Specification, and this data structure is also not “designed to support specific data manipulation function”. See MPEP 2106.01 (The definition of “data structure” is a “physical or logical relationship among data elements, designed to support specific data manipulation functions” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5<sup>th</sup> ed. 1993). However the “data structure” in the claim limitation is not seen to be “data structure” explicitly supported in Application Specification and it is also not designed to support specific data manipulation functions. Thus it does not meet the definition of the true data structure. Thus, the claim “SLA data structure” is viewed as Nonfunctional Descriptive Material.

**As for dep. claim 5**, which has steps similar to the steps of claim 4 above but deal with other feature related to service offerings, i.e. outsourced service offering, and combining this feature in to the form of claim 4 for SLA use, first of all, the specific steps of creating, combining and arranging are taught as claim 4 above. Moreover, the

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duplicate of services or steps for multiple effects are well known and would have been obvious to a skilled artisan. See *In re Harza*, 124 USPQ 378, CCPA 1960. Secondly, these are mere printed/displayed matters on the form and the differences in the printed matters such as "internal service level objectives" or "external service level objectives" are not critical and have no patentable weight. See *In re Ngai*, cited in the rejection of claim 1 above.

**As for dep. claims 6-7, 9** which further deal with manipulations of the information/data on the SLA form, i.e. redefining or combining or arranging the objectives or information about the (SL) objectives, etc., these are considered as non-functional descriptive material (NFDM) and thus having no patentable weight. This appears to be a "data processing and document/form forming" method, therefore, the limitation after "data" or "information" such as "hierarchy" or "dependency loop", etc. are mere printed/displayed information on the form, and are considered as non-functional descriptive material (NFDM) or printed matters, thus having no patentable weight and does not need to be taught by the prior art. Nonfunctional descriptive material can not render nonobvious an invention that would have otherwise been obvious. *In re Gulack*, 703 F. 2d 1381, 1385, 217 USPQ 401, 40-4 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability. See MPEP 2106.01.

**As for claim 8**, which deals with the step of exposing or disclosing or revealing the information e.g. hierarchy level of SLA to a customer over a data communication network, this is fairly taught in CHEN ET AL, see figures 2, 3, 5-6.

**As for independent claim 10**, which deals with a machine readable storage having stored thereon a computer program for constructing a composite, multi-tier service level agreement (SLA), this claim is carried out the step of the rejected independent claim 4 above, it is rejected for the same reason sets forth the independent claim 4 cited above.

**As for dep. claims 11-13, 15** which have the similar limitation as dep. claims 5-7, 9 rejected above, they are rejected for the same reason set forth the dep. claims 5-7, 9 cited above.

**As for dep. claim 14**, which has the similar limitation as dep. claim 8 above, it is rejected for the same reason sets for dep. claim 8 above.

#### **10) Response to Arguments**

**5.** Applicant's arguments filed 01/21/11 have been fully considered but they are not persuasive.

##### **I. With respect to Claim Rejection under 35 USC § 101**

As for issue on the 101 rejection on the claims 4-9 (method), Examiner agrees with Appellant (pages 7-9 of the brief) that the machine or transformation test is not the exclusive test of determining patent eligibility under USC § 101 and that the Supreme Court has found that the machine or transformation test is "a useful clue". Examiner also agrees with Appellant that the consideration for determination eligibility of claimed subject matter concern whether the claim is directed to an abstract idea. Base on the USPTO interim guidance issued July 27, 2010, the determination of whether the claim is directed to an abstract idea includes factors related to the machine or transformation

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test. Therefore, with respect to Appellant's claims, the analysis presented in the prior office action still holds and provides a showing that the claim is directed to an abstract idea.

Appellant argues that "a person of ordinary skill in the art would readily appreciate that practicable embodiments of the claimed invention would be conducted with the aid of a computing machine, such as a server", however this is not persuasive in that scope of the claims are not limited to only the argued embodiment. When the scope of the claim encompasses both statutory and non statutory embodiment, the claims must be rejected under 35 USC 101. The evidence has showed in Appellant's specification page 7, lines 5-6 indicates "*The separate SLAs can be enforced with respect to the management of the components by the appropriate management entities*", thus this is not required that the SLAs is enforced by a machine. This is also further consistent with Appellant's specification on pages 2, lines 3-5 "*SLA is a contract that specifies an agreement between a service provider and customer regarding a level of service to be provided by the service provider to the customer in respect to a specific resource or resources*", and also pages 10, line 15 to page 11, line 10 where the SLAs are described as "promise" which make it clear that the SLA can be processed by the human mind.

Assuming for the sake of argument (brief, page 9) that a memory on which the data is stored is present, Appellant's argument concerning about the transformation of the memory are not persuasive. It is noted that the definition of transformation in August 24, 2009 Examination Instruction indicated "Transformation of an article means

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that "article has *changed* to a different state or thing. Changing to a different state or thing usually means more than *simply* using an article or changing the location of an article. *A new or different function* or use can be evidence that an article has been transformed". In light of the definition, a memory that has different magnetic polarity, electrical charge, or the like depending on the information is simply using an article and does not have a new or different function, it is merely behaving as a memory.

Therefore, Applicant's argument with respect to the transformation of the memory is not persuasive because the claimed language can broadly interpreted to be done by a human and thus is directed to an abstract idea.

Additional, The Examiner has indicated in the previous final office action that claim 4 appears to be tied to a particular machine, as shown in the preamble "A method, within a computer hardware device, of constructing a composite, multi-tier service level agreement", however the recitation "within a computer hardware device" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claim 4 preamble includes only recitation of structure is in the nominal recitation in the preamble citing "a method within a computer hardware device". This recitation is so generic as to encompass any computing system, such that anyone who performed

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this method in practice would fall within the scope of these claims. Thus, the recitation of "within a computer hardware device" in the preamble is not, in fact, a limitation at all to the scope of the claim, and the claim is directed, in essence, to the method performed by any means. A nominal recitation in the preamble is not allowed to convert an otherwise ineligible claim into an eligible one. See *Ex parte Langemyr*, Board Informative Opinion

<http://www.uspto.gov/ip/boards/bpai/decisions/inform/fd081495.pdf> wherein preamble of claim 1 within *Langemyr* is reproduced below:

“A method executed in a computer apparatus for creating a model of a combined physical system having physical quantities by representing physical quantities of the combined physical system in terms of a combined set of partial differential equations, the method comprising”

The body of claim in *Langemyr* does not recited the method step is performed by a machine; the machine is only mentioned in the preamble as “executed in a computer apparatus”. This is parallel to Applicant’s claim construction where the only machine "within a computer device" is shown in the preamble. As a result, the preamble is not sufficient to render the claim statutory.

## **II. With respect to Claim Rejection under 35 USC § 103**

With respect to Appellant's sole argument against the prior art rejection, Appellant comments (pages 10-12 regarding claims 1, 4 and 10) that CHEN discloses combining different levels of policies with a SLA, but not combining a plurality SLAs into

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a single, composite SLA data structure as in the Appellant's invention. However this is not persuasive for the following reasons:

1) CHEN, figures 5A-B and par. 0050 discloses "intra-SLA /inter-SLA *the different level of policies/service are combined to achieve SLA-enabled quality of service (QoS)* inter-working or SLA-based End-to-End Qos Provisioning; also par. 0056 discloses the level of policies/service can be *represented at different levels, ranging from high level quality of service goals to device specific configuration parameter*". Also Chen, par. 0061, 0062, 0065, 0068 and figures 6A-6B) shows the "hierarchical organization" is based on the three levels of policies that are depended on each other and derived from SLA. Therefore, CHEN teaches the claimed invention "combining said internal SLA data object with said external SLA data object to form said composite SLA data structure".

2) It appears that a composite multi-tier service level agreement (SLA) stored within a computer hardware device" is considered as the type of information or data, wherein this composite multi-tier service level agreement information comprising the information of a services offerings with both internal and external service level objectives, hierarchical organization. This type of information of the service level agreement is determined to be non-functional descriptive material (NFDM) because the data "does not" impart functionality when employed as a computer component, thus having no patentable weight. See MPEP 2106.01 "Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material."

Noted: the claim “SLA data structure” is not seen to be explicitly supported in the Application Specification, and this data structure is also not “designed to support specific data manipulation function”. See MPEP 2106.01 (The definition of “data structure” is a “physical or logical relationship among data elements, designed to support specific data manipulation functions” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5<sup>th</sup> ed. 1993). However the “data structure” in the claim limitation is not seen to be “data structure” explicitly supported in Application Specification and it is also not designed to support specific data manipulation functions and it does not meet the definition of the true data structure. Thus, the claim “SLA data structure” is viewed as Nonfunctional Descriptive Material. Appellant’s specification on pages 2, lines 3-5 indicates “SLA is a contract that specifies an agreement between a service and customer regarding a level of service to be provided by the service provider to the customer in respect to a specific resource or resources”, and also pages 10, line 15 to page 11, line 10 where the SLAs are described as “promise” which make it clear that the SLA can be processed by the human mind.

Furthermore, the Examiner notices that in the final rejection mailed on 08/23/10, the Examiner responded to Applicant's argument regarding the functionality of the SLA data structure and found it to be Non Functional Descriptive Material. Applicant has not provided any further argument as why it is considered functional.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully Submitted,

*/Thuy Vi Nguyen/*

Examiner, Art Unit 3689

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Supervisory Patent Examiner, Art Unit 3688

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